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ATTY. DKT. NO. 5659-06900 m PTO-1449 (modified) SERIAL NO. 09/841,298 TRADE ist of Patents and Publications CONFIRMATION NO.: 3893 For Applicant's Information APPLICANT: Wellington et al. Disclosure Statement FILING DATE: April 24, 2001 GROUP: 1764 OTHER ART EXAM. REF. OTHER ART (including Author, Title, Date, Pertinent Pages, etc.) DES. INITIALS U.S. Patent and Trademark Office, "Office Communication" for Application No. 10/279,226 SOAC-01 mailed September 13, 2004 (23 pages). U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/840,936 NOA-01 mailed October 9, 2004 (7 pages).

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DATE CONSIDERED: 13/13/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Page 1 of 1 (modified)

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement  OTHER ART  EXAM. REF. NITIALS  SOA-101  SOA-101  DD-01  DD-01  DD-01  ATTY. DKT. NO. 5659-06900  SERIAL NO. 09/841,298  CONFIRMATION NO.: 3893  GROUP: 1764  OTHER ART  OTHER ART  OTHER ART (including Author, Title, Date, Pertinent Pages, etc.)  Mailed September 13, 2004 (23 pages).  Shreve, Norris R., CHEMICAL PROCESS INDUSTRIES, Third Edition, McGraw-Hill, Inc., 1967, pp. 312-316.			
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List of Patents a For Applicant's Disclosure State	Informati	on All 6	3 2004	APPLICANT	: Wellingtor	ı et al.	CONFIRMATION NO.: 3893
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Page 1 of 1 (modified)



### **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18
Stylesheet Version v18.0

Title of Invention IN SITU THERMAL PROCESSING OF A COAL FORMATION TO PRODUCE A MIXTURE OF OLEFINS, OXYGENATED HYDROCARBONS, AND AROMATIC HYDROCARBONS

**Application Number:** 

09/841298

Confirmation Number:

3893

First Named Applicant: Scott Wellington
Attorney Docket Number: 5659-06900

Art Unit:

1764

Examiner:

Thuan D. Dang

Search string:

( 6698515 or 6702016 or 6708758 or 6712135 or 6712136 or 6712137 or 6715546 or 6715547 or 6715549 or 6712548 or 6719047 or 6722431 or 6722430 or 6722429 or 6725920 or 6725921 or 6725928 or 6729397 or 6729396 or 6729401 or 6729395 or 6732794 or 6732796 or 6736215 or 6739394 or 6739393 or 6742593 or 6742587 or 6742589 or 6742588 or 6745837 or 6745831 or 6749021 or 6752210 or 6758268 or 6763886 or 6769485 or 6769483 or 6581684 or 6588504 or 6588503 or 6591906 or 6591907 or 6607033

or 6609570 or 6688387 or 6761216 or

20040069486 or 20040015023 or 20030213594

or 20040040715 or 20040020642 or

20040108111 ).pn.

#### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

içi	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
<b>S</b>	1	6698515	2004-03-02	Karanikas et al.			
	2	6702016	2004-03-09	de Rouffignac et al.			
	3	6708758	2004-03-23	de Rouffignac et al.			
	4	6712135	2004-03-30	Wellington et al.			
	5	6712136	2004-03-30	de Rouffignac et al.		٠	
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. 6	6712137	2004-03-30	Vinegar et al.
7	6715546	2004-04-06	Vinegar et al.
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	44	6607033	2003-08-19	Wellington et al.
	45	6609570	2003-08-26	Wellington et al.
	46	6688387	2003-02-10	Wellington et al.
$\sqcap$	47	6761216	2004-07-13	Vinegar et al.

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Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
	1	20040069486	2004-04-15	Vinegar et al.			
	2	20040015023	2003-11-20	Wellington et al.			
	3	20030213594	2003-11-20	Wellington et al.			
	4	20040040715	2004-03-04	Wellington et al.			
	5	20040020642	2004-02-05	Vinegar et al.	•		
	6	20040108111	2004-06-10	Vinegar et al.		*	

# Signature

Examiner Name	Date
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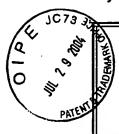
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Page 1 of 1 (modified)

### **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18 Stylesheet Version v18.0



Title of Invention

Title IN SITU THERMAL PROCESSING OF A COAL FORMATION TO PRODUCE A MIXTURE OF OLEFINS, OXYGENATED HYDROCARBONS, AND AROMATIC **HYDROCARBONS** 

Application Number:

09/841298

Confirmation Number:

3893

First Named Applicant:

**Scott Wellington** 

Attorney Docket Number: 5659-06900

Art Unit:

1764

Examiner:

T. D. Dang

Search string:

(3004596 or 3342258 or 3455383 or 3501201

or 3502372 or 3759574 or 4160479 or 4375302

or 4483398 or 4815790 ).pn.

#### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	3004596	1961-10-17	Parker et al.			
	2	3342258	1967-09-19	Prats			
	3	3455383	1969-07-15	Prats et al.			-
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	6	3759574	1973-09-18	Beard			
$\prod$	7	4160479	1979-07-10	Richardson et al.			
	8	4375302	1983-03-01	Kalmar			
	9	4483398	1984-11-20	Peters et al.			
	10	4815790	1989-03-28	Rosar et al.			

### **Signature**

Date

Form PTO-1			ATTY. DKT. NO. 5659-06900	SERIAL NO. 09/841,298
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	CC01	Porter, H. P., Petroleum Dictio	onary for Oil, Field, and Factory, The Gulf Pub	lishing Company, 1948, 4th Ed., page 312.
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## WENTELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18 Stylesheet Version v18.0

> Title of Invention

Title IN SITU THERMAL PROCESSING OF A COAL FORMATION TO PRODUCE A MIXTURE OF OLEFINS, OXYGENATED HYDROCARBONS, AND AROMATIC **HYDROCARBONS** 

Application Number:

09/841298

Confirmation Number:

3893

First Named Applicant:

**Scott Wellington** 

Attorney Docket Number: 5659-06900

Art Unit:

1764

Examiner:

T. D. Dang

Search string:

(3994340 or 3994341 or 4460044 or 4696345

or 2584605 or 2969226 or 3982591 or

3982592 ).pn.

#### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

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	2	3994341	1976-11-30	Anderson et al.			
	3	4460044	1984-07-17	Porter			
	4	4696345	1987-09-29	Hsueh			
	5	2584605	1952-02-05	Merriam et al.			
	6	2969226	1961-01-24	Huntington			•
	7	3982591	1976-09-28	Hamrick et al.			
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### Signature

Examiner/Name	Date			
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		RADE	U.S. PATENT	DOCUMENTS					
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DATE CONSIDERED: 12/13/04



## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
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Title of Invention

Title IN SITU THERMAL PROCESSING OF A COAL FORMATION TO PRODUCE A MIXTURE OF OLEFINS, OXYGENATED HYDROCARBONS, AND AROMATIC HYDROCARBONS

**Application Number:** 

09/841298

Confirmation Number:

3893

First Named Applicant:

**Scott Wellington** 

Attorney Docket Number: 5659-06800

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Art Unit:

1764

Examiner:

Glenn A. Caldarola

Search string:

(3947656).pn.

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Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init		Patent No.	Date	Patentee	Kind	Class	Subclass
<b>S</b>	1	3947656	1976-03-30	Lodi			

### Signature

Examiner Name	Date	
Dery J. Johnson	12/13/04	



# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18 Stylesheet Version v18.0

> Title of Invention

Title IN SITU THERMAL PROCESSING OF A COAL FORMATION TO PRODUCE A MIXTURE OF OLEFINS, OXYGENATED HYDROCARBONS, AND AROMATIC **HYDROCARBONS** 

Application Number:

09/841298

**Confirmation Number:** 

3893

First Named Applicant:

Scott Wellington

Attorney Docket Number: 5659-06900

Art Unit:

1764

Examiner:

Glenn A. Caldarola

Search string:

( 4931171 or 4737267 or 4384948 or 3593790

or 3497000 or 3244231 or 3223166 ).pn.

### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

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		2	4737267	1988-04-12	Pao et al.			
		3	4384948	1983-05-24	Barger			
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		5	3497000	1970-02-24	Hujsak et al.			
		6	3244231	1966-04-05	Grekel et al.			
		7	3223166	1965-12-14	Hunt et al.			•

### Signature

Examiner Name	Date
Chip Loturo	12/13/04

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For Applicant's Info ATTY. DKT. NO. 5659-06900 SERIAL NO. 09/841,298 , AUG 1 5 20103 APPLICANT: Wellington et al. GROUP: 1764 Disclosure Statement (Use several sheets if necessary) FILING DATE: April 24, 2001 Legane W.S. PATENT-DOCUMENTS DOCUMENT CLASS FILING DATE IF EXAM. REF. DATE NAME **SUB** APPROPRIATE DES INITIALS NUMBER **CLASS M S**5 2,857,002 10/21/1958 Pevere et al. U1 3,165,154 1/12/1965 Santourian U2 4,458,757 7/10/1984 Bock et al. 1 3 3 FOREIGN PATENT DOCUMENTS 4 DOCUMENT TRANSLATION EXAM. **SUB** CLASS REF. DES. DATE **COUNTRY** INITIALS **CLASS** YES/NO NUMBER 12/30/1994 1836876 SU T01 Y OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) T02 Burnham, Alan, K. "Oil Shale Retorting Dependence of timing and composition on temperature and heating rate", January 27, 1995, (23 pages). Burnham et al. "A Possible Mechanism of Alkene/Alkane Production in Oil Shale Retorting, (7 pages). T03 T04 Campbell, et al., "Kinetics of oil generation from Colorado Oil Shale" IPC Business Press, Fuel, 1978, (3 pages). T05 Cummins et al. "Thermal Degradation of Green River Kerogen at 150° to 350 °C", Report of Investigations 7620, U.S. Government Printing Office, 1972, (pages 1-15). Cook, et al. "The Composition of Green River Shale Oils", United Nations Symposium on the Development and T06 Utilization of Oil Shale Resources, Tallinn, 1968, (pages 1-23). Hill et al., "The Characteristics of a Low Temperature in situ Shale Oil" American Institute of Mining, Metallurgical & Petroleum Engineers, 1967 (pages 75-90)... Dinneen, et al. "Developments in Technology for Green River Oil Shale" United Nations Symposium on the Development and Utilization of Oil Shale Resources, Tallinn, 1968, (pages 1-20). De Rouffignac, E. "In Situ Resistive Heating of Oil Shale for Oil Production-A Summary of the Swedish Data, (4 T09 Dougan, et al. "The Potential for in situ Retorting of Oil Shale in the Piceance Creek Basin of Northwestern T10 Colorado", Quarterly of the Colorado School of Mines (pages 57-72). T11 Hill et al. "Direct Production of Low Pour Point High Gravity Shale Oil" I&EC Product Research and Development, 1967, Volume 6, (pages 52-59). T12 Yen et al., "Oil Shale" Developments in Petroleum Science, 5, Elsevier Scientific Publishing Co., 1976 (pages 187-198). T13 SSAB report, "A Brief Description of the Ljungstrom Method for Shale Oil Production," 1950, (12 pages). T14 Salomonsson G., SSAB report, "The Lungstrom In Situ-Method for Shale Oil Recovery, 1950 (28 pages) T15 "Swedish shale oil-Production method in Sweden," Organisation for European Economic Co-operation, 1952, 70 pages). T16 SSAB report, "Kvarn Torp" 1958, (36 pages). T17 SSAB report, "Kvarn Torp" 1951 (35 pages). SSAB report, "Summary study of the shale oil works at Narkes Kvarntorp" (15 pages). T18 Vogel et al. "An Analog Computer for Studying Heat Transfrer during a Thermal Recovery Process," AIME Petroleum Transactions, 1955 (pages 205-212). 13/04 **EXAMINER:** DATE CONSIDERED:

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Page 1 of 3

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Information Disclosure Statement--PTO 1449 (modified)

ATTY, DKT, NO. 5659-06900 SERIAL NO. 09/841,298 Form PTO-1449 (modified) AUG 1 5 2003 List of Patents and Publications GROUP: 1764 For Applicant's Information APPLICANT: Wellington et al. Disclosure Statement (Use several sheets if necessary) FILING DATE: April 24, 2001 "SKIFEROLJA GENEM UPPVARMNING AV SKIFFERBERGET," Faxin Department och Namder, 1941, (3 T20 'Aggregleringens orsaker och ransoneringen grunder", Av director E.F.Cederlund I Statens T21 livesmedelskonmmission (1page). Ronnby, E. "KVARNTORP-Sveriges Storsta skifferoljeindustri," 1943, (9 pages) T22 SAAB report, "The Swedish Shale Oil Industry," 1948 (8 pages). T23 Gejrot et al., "The Shale Oil Industry in Sweden," Carlo Colombo Publishers-Rome, Proceedings of the Fourth T24 World Petroleum Congress, 1955 (8 pages) Hedback, T. J., The Swedish Shale as Raw Material for Production of Power, Oil and Gas," XIth Sectional T25 Meeting World Power Conference, 1957 (9 pages) T26 SAAB, "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand", 1955 Vol. 1, (141 pages) English SAAB, "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Figures", 1955 T27 Vol. 2, (146 pages) English. "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Memorandum re: T28 tests", 1955 Vol. 3, (256 pages) English. T29 Helander, R.E., "Santa Cruz, California, Field Test of Carbon Steel Burner Casings for the Lins Method of Oil Recovery", 1959 (38 pages) English. Helander et al., Santa Cruz, California, Field Test of Fluidized Bed Burners for the Lins Method of Oil Recovery" T30 1959, (86 pages) English. SSAB report, "Bradford Residual Oil, Athabasa Ft. McMurray" 1951, (207 pages), partial translation. T31 T32 "Lins Burner Test Results-English" 1959-1960 T33 SSAB "Annual Reports, SSAB Laboratory, Address Annually Issues-Shale and Ash, Oil, Gas, Waste Water, Analytical", 1953-1954, (166 pages). Swedish SSAB report, "Financial Matter, Swedish taxes, etc.," 1960-1961 (37 pages). Swedish T34 SSAB report, "Cost For Mining," 1959-1979 (13 pages). Swedish T35 SSAB report, "Cost Comparison of Mining and Processing of Shale and Dolomite Using Various Production T36 Alternatives", 1960, (64 pages). Swedish SSAB report, "Assessment of Future Mining Alternatives of Shale and Dolomite," 1962, (59 pages) Swedish. T37 SSAB report. "Kartong 2 Shale: Ljungstromsanlaggningen" (104 pages) Swedish. T38 T39 SAAB, "Photos", (18 pages). T40 SAAB report, "Swedish Geological Survey Report, Plan to Delineate Oil shale Resource in Narkes Area (near Kvarntorp)," 1941 (13 pages). Swedish. SAAB report, "Recovery Efficiency," 1941, (61 pages). Swedish. SAAB report, "Geologic Work Conducted to Assess Possibility of Expanding Shale Mining Area in Kvarntorp; T42 Drilling Results, Seismic Results," 1942 (79 pages). Swedish. SSAB report, "Ojematinigar vid Norrtorp," 1945 (141 pages). T43 T44 SSAB report, "Inhopplingschema, Norrtorp II 20/3-17/8", 1945 (50 pages). Swedish. T45 SSAB report, "Secondary Recovery after LINS," 1945 (78 pages) SSAB report, "Maps and Diagrams, Geology," 1947 (137 pages). Swedish. T46

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	nodified)	ATTY. DKT. NO. 5659-06900	SERIAL NO. 09/841,298
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> Title of Invention

ELECTRONIC INFORMATION DISCLOSURE STATEMENTS

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\* FORMATION TO PRODUCE A MIXTURE OF OLEFINS. **OXYGENATED HYDROCARBONS, AND AROMATIC HYDROCARBONS** 

Application Number:

09/841298

Confirmation Number:

3893

First Named Applicant:

**Scott Wellington** 

Attorney Docket Number: 5659-06900

Art Unit:

1764

Examiner:

Marian C. Knode

Search string:

( 3285335 or 3456721 ).pn.

### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
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W	2	3456721	1969-07-22	Smith			

## Signature

Examiner Name	Date
Deur Dollison	12/13/04

SERIAL NO. 09/841,298 ATTY, DKT. NO. 5659-06900/TH1994 Form PTO-1449 (modified) List of Patents and Publication For Applicant's Information APPLICANT: Wellington et al. **GROUP: 1764** Disclosure Statement FILING DATE: April 24, 2001 Use several sheets if necessary U.S. PATENT DOCUMENTS & TRADE! NAME CLASS SUB FILING DATE IF REF. DOCUMENT NUMBER DATE EXAM. CLASS APPROPRIATE DES. June 78 HI 4,093,025 Terry Jan-90 Price **H3** 4,895,206 McEachen Sep-1885 J1 326,439 Feb-1928 Downey et. al. J2 1,681,523 Jun-1941 Looman J3 2,244,256 Carpenter J4 2,714,930 Aug-1955 Gill Dec-1970 J5 3,547,193 Feb-1971 3,562,401 Long **J6 J7** 4,089,374 May-1978 Terry Varney, Sr. J8 4,423,311 Dec-1983 **J9** 4,489,782 Dec-1984 **Perkins** J10 4,626,665 Dec-1986 Fort, III Sep-1987 Stahl et. al. J11 4,694,907 Jan-1993 Goncalves J12 5,182,792 Wilson et. al. 5,402,847 Apr-1995 J13

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Page 1 of 1

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APPLICANT: Wellington et al.

SERIAL NO. 09/841,298

GROUP: 1764

FILING DATE: April 24, 2001

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**GROUP: 1764** 

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SERIAL NO. 09/841,298

APPLICANT: Wellington, et al.

**GROUP: 1764** 

FILING DATE: April 24, 2001

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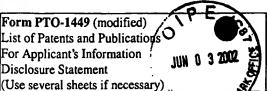
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SERIAL NO. 09/841,298

APPLICANT: Wellington, et al.

GROUP: 1764

FILING DATE: April 24, 2001

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APPLICANT: Wellington, et al.

GROUP: 1764

FILING DATE: April 24, 2001

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APPLICANT: Wellington, et al.

GROUP: 1764

FILING DATE: April 24, 2001

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(Use several sheets if necessary)
FILING DATE: April 24, 2001

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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SERIAL NO. 09/841,298

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ATTY. DKT. NO. 5659-06900/TH1994

APPLICANT: Wellington, et al.

FILING DATE: April 24, 2001

**GROUP: 1764** 

SERIAL NO. 09/841,298

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XAM.	REF. DES.	-DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE I APPROPRIATE
1100	Cı	1,269,747	6/1918	Rogers	1	,	
	C2	1,457,479	6/1923	Wolcott			May SH
	C3	1,634,236	6/1927	Ranney		12	1/4× 5/1
	C4	2,630,307	3/1953	Martin			06.1
	C5	2,685,930	8/1954	Albaugh		3	12002
	C6	2,703,621	3/1955	Ford			00
	C7	2,771,954	11/1956	Jenks et al.			
	C8	2,793,696	5/1957	Morse			
	C9	2,890,754	6/1959	Hoffstrom et al.			
	C10	2,890,755	6/1959	Eurenius et al.			
	CII	2,906,340	9/1959	Herzog			,
	C12	2,932,352	4/1960	Stegemeier			
	C13	2,958,519	11/1960	Hurley			
	C14	3,010,513	11/1961	Gerner			
	C15	3,010,516	11/1961	Schleicher			
	C16	3,036,632	5/1962	Koch et al.		F (19)	
	C17	3,044,545	7/1962	Tooke			
	C18	3,061,009	10/1962	Shirley			
	C19	3,062,282	11/1962	Schleicher			
	C20	3,084,919	4/1963	Slater			<del></del>
	C21	3,113,619	12/1963	Reichle		11	
	C22	3,116,792	1/1964	Purre			
	C23	3,120,264	2/1964	Barron			<del></del>
	C24	3,127,935	4/1964	Poettmann et al			
	C25	3,127,936	4/1964	Eurenius			
	C26	3,132,692	5/1964	Marx et al.			
	C27	3,205,944	9/1965	Walton			<del></del>
	C28	3,233,668	2/1966	Hamilton et al.	1		
	C29	3,273,640	9/1966	Huntington	1 11		
	C30	3,275,076	9/1966	Sharp	7 / /	-++	

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SERIAL NO. 09/841,298

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EXAM.	REF.	DOCUMENT NUMBER	DATE	NAME	OT 4.00	T	
INITIALS	DES.	DOCUMENT NUMBER	DAIE	NAME	CLASS	SUB CKASS	FILING DATE IF APPROPRIATE
$\bigcirc$	C31	3,294,167	12/1966	Vogel		75	<b>A</b>
1	C32	3,352,355	11/1967	Putman		Max	Ella
	C33	3,379,248	4/1968	Strange	6	0	8 ZONED
	C34	3,605,890	9/1971	Holm			
	C35	3,617,471	11/1971	Schlinger et al.			90
	C36	3,661,423	5/1972	Garrett			
	C37	3,770,398	11/1973	Abraham et al.			
	C38	3,882,941	5/1975	Pelofsky			
	C39	3,948,319	4/1976	Pritchett			
	C40	3,954,140	5/1976	Hendrick			
	C41	3,986,349	10/1976	Egan			
	C42	3,999,607	12/1976	Pennington et al.			
	C43	4,008,762	2/1977	Fisher et al.			
	C44	4,019,575	4/1977	Pisio et al.			
	C45	4,026,357	5/1977	Redford			
	C46	4,049,053	9/1977	Fisher et al.			1
	C47	4,057,293	11/1977	Garrett			
	C48	4,067,390	1/1978	Camacho et al.			
	C49	4,069,868	1/1978	Теггу			
	C50	4,084,637	4/1978	Todd			
	C51	4,114,688	9/1978	Тетту			
	C52	4,144,935	3/1979	Bridges et al.			
	C53	4,183,405	1/1980	Magnie			
	C54	4,228,854	10/1980	Sacuta			
	C55	4,243,101	1/1981	Grupping			
	C56	4,277,416	7/1981	Grant			
	C57	4,306,621	12/1981	Boyd et al.			
	C58	4,324,292	4/1982	Jacobs et al.			
<u> </u>	C59	4,344,483	8/1982	Fisher et al.		1	

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C87

**C88** 

C89

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4,928,765

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WANG	REF.	DOCUMENT NUMBER	U.S. PATENT D	NAME	CLASS	St	JB FI	LING DATE I
XAM. NITIALS	DES.	DOCUMENT NUMBER	DAIL	TV HVIE		C <b>/</b>	ASC A	PPROPRIATE
(1)	C90	5,082,055	1/1992	Hemsath			'SC	SI.
1	C91	5,217,076	6/1993	Masek		. 1	AY	EIVED
	C92	5,261,490	11/1993	Ebinuma		10		2002
-1-	C93	5,285,846	2/1994	Mohn				UQ
	C94	5,289,882	3/1994	Moore				
	C95	5,411,104	5/1995	Stanley				
	C96	5,632,336	5/1997	Notz et al.				
	C97	5,713,415	2/1998	Bridges				
	C98	6,328,104	12/2001	Graue				
	Di	3,149,670	9/1964	Grant				
	D2	3,380,913	4/1968	Henderson				
	D3	3,794,116	2/1974	Higgins				
	D4	4,197,911	4/1980	Anada				
	D5	4,412,124	10/1983	Kobayashi				
1	D8	3,316,962	5/1967	Lange	1		1	
		F	OREIGN PATEN	T DOCUMENTS				
XAM.	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	C	LASS	SUB CLAS	The state of the s
()(1)	C99	2,015,460	10/1991	CA				
i	C100	940558 A1	9/1999	EP				
	C101	01/81723 A1	11/2001	wo				
	C102	01/81505 A1	11/2001	wo				
	D6	1,165,361	4/1984	CA				
	D7	1,168,283	5/1994	CA				
		OTHER ART (I	ncluding Author,	Title, Date, Pertinent P	ages, Etc.	)		
00	C103	Appalachian Coals: Potential R Enhancing CBM Production; C The Pros and Cons of Carbon I	.W. Byer, et al., P	roceedings of the Interna	tional Coa	lbed Me	ethane S	ymposium.
	C104	Sequestration Technologies; C PA.	. Hanisch, Environ	mental Science and Tech	nology, A	merican	Chemic	al Society, Eas
		Pilot Test Demonstrates How (	Carbon Dioxide En	hances Coal Bed Methar	ne Recover	ry, Lann	y Schoe	ling and Micha

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C105 McGovern, Petroleum Technology Digest, September 2000, p. 14-15.

Form PTO-1449 (modified) ATTY. DKT. NO. 5659-06900/TH1994 SERIAL NO. 09/841,298 List of Patents and Publications APPLICANT: Wellington, et al. For Applicant's Information **GROUP: 1764** Disclosure Statement FILING DATE: April 24, 2001 (Use several sheets if necessary) OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) In Situ Measurement of Some Thermoporoelastic Parameters of a Granite, Berchenko et al., Poromechanics, A Tribute C106 to Maurice Biot, 1998, p. 545-550. Conversion characteristics of selected Canadian coals based on hydrogenation and pyrolysis experiments, W. Kalkreuth, C. Roy, and M. Steller. Geological Survey of Canada, Paper 89-8, 1989, pages 108-114, XP001014535 Passey et al., US Patent Application Publication 2001/0049342 A1, December 6, 2001. Tar and Pitch, G. Collin and H. Hoeke. Ullmann's Encyclopedia of Industrial Chemistry, Vol. A 26,1995, p. 91-127. D10

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ATTY. DKT. NO. 5659-06900/TH1094

APPLICANT: Wellington, et al.

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		DOCUMENT NUMBER	U.S. PATENT D	NAME	CLASS	SUB	FILING DATE II
	REF. DES.	DOCOMENT NOMBER				CLASS	APPROPRIATE
	Al	760,304	05/1904	Butler			-
	A2	1,342,741	06/1920	Day			ļ
	A3	1,510,655	10/1924	Clark	<del>                                     </del>	<del>                                     </del>	
	A4	1,666,488	02/1927	Crawshaw			
	A5	1,913,395	11/1929	Karrick	1		
	A6	2,423,674	07/1947	Agren	-		
	A7	2,444,755	07/1948	Steffen	╁-╁-		
<u> </u>	A8	2,466,945	02/1946	Greene	╁╾┼╌	<del></del>	<del> </del>
-	A9	2,472,445	06/1949	Sprong		┼-┼-	
	A10	2,484,063	10/1949	Ackley		+-+-	
$\dagger$	A11	2,497,868	02/1950	Dalin	4-4-	+-+-	
1	A12	2,548,360	04/1951	Germain			
	A13	2,593,477	04/1952	Newman et al.	++	-	
+	A14	2,595,979	05/1952	Pevere et al.	+-+	+-+-	
$\top$	A15	2,630,306	01/1952	Evans		+-	
+	A16	2,634,961	04/1953	Ljungstrom	-	++	1
_	A17	2,642,943	06/1953	Smith et al.	+-+	+-+	
-	A18	2,670,802	03/1954	Ackley	+-+		
$\neg \dagger$	A19	2,695,163	11/1954	Pearce et al.	+		
-	A20	2,732,195	01-24-56	Ljungstrom			
$\dashv$	A21	2,734,579	02-14-56	Elkins	_	\	
1	A22		02-05-57	Fisher et al.	_	+-+	
_	A23	2,777,679	01/1957	Ljungstrom		<del></del>	
$\neg$	A24		02/1957	Ljungstrom			7 7 7
1	A25		03/1957	Alleman		$H \rightarrow H$	
+	A26		04/1957	Ljungstrom		$H \rightarrow I$	
+	A27		08/1957	Kile		-	<b>X</b>
	A28		07/1958	Salomonsson	A STar	-	CA CA
-+	A29		09/1959	Salomonsson et al.		OV	W ()
-+	A30		09/1959	Henning		19/13	



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XAM.	REF.	DOCUMENT NUMBER	U.S. PATENT D DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
XAM. VITIAIA	DES.				+	CLASS	ATROTALITZ
	A31	2,914,309	11/1959	Salomonsson	<del>      -   -   -   -   -   -   -   -   -</del>	<del>                                     </del>	<del> </del>
<del></del>	A32	2,923,535	02/1960	Ljungstrom	<del>                                     </del>		<del> </del>
	A33	2,939,689	06/1960	Ljungstrom	<del>                                     </del>	<del> - </del>	<del> </del>
	A34	2,954,826	10/1960	Sievers		┼-┼	
	A35	2,974,937	03/1961	Kiel		+-+-	
	A36	2,994,376	08/1961	Crawford et al.	_	┼-┼-	
	A37	2,998,457	08/1961	Paulsen	+		
	A38	3,004,603	10/1961	Rogers et al.		<del>                                     </del>	
	A39	3,007,521	11/1961	Trantham et al.			
	A40	3,095,031	06/1963	Eurenius et al.	_	+	
	A41	3,105,545	10/1963	Prats et al.		+	
	A42	3,106,244	10/1963	Parker			
	A43	3,110,345	11/1963	Reed et al.		-	
	A44	3,113,623	12/1963	Krueger		1	<del> </del>
	A45	3,114,417	12/1963	McCarthy			
	A46	3,131,763	05/1964	Kunetka et al.	++-		
	A47	3,139,928	07/1964	Broussard			
	A48	3,142,336	07/1964	Doscher			
	A49	3,149,672	10/1964	Orkiszewski et al.			
	A50	3,163,745	12/1964	Boston			
	A51	3,164,207	01/1965	Thessen et al.			
	A52		05/1965	Hardy		_	
	A53		05/1965	Schroeder			
-	A54		06/1965	Miller			
-	A55		10/1965	Prats et al.			
-	A56		10/1965	Williams			<b>O</b> Y
-	A57		10/1965	Tamplen			242
1	A58		10/1965	Alexander et al.			Charles C
	-	/			1		2 W. Y.

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М.	REF.	DOCUMENT NUMBER	U.S. PATENT D	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	DES.	3,237,689	03/1966	Justheim	<u>_</u>	1	
	A60	3,241,611	03/1966	Dougan	11	-	
<del>                                     </del>	A61	3,250,327	05/1966	Crider			
-	A62	3,267,680	08/1966	Schlumberger			
+	A63	3,284,281	11/1966	Thomas	1-		
<del>                                     </del>	A64	3,338,306	08/1967	Cook			
<del> </del>	A65	3,528,501	09/1970	Parker		<del> </del>	
╂	A66	3,595,082	07/1971	Miller et al.			
+	A67	3,973,628	08/1976	Colgate			
+	A68	3,992,148	11/1975	Child			
1	A69	3,993,132	11/1977	Garrett		╅┈┼╌	
1	A70	4,016,239	04/1977	Fenton	-	+	
	A71	4,076,761	02/1978	Chang et al.	+	++	
+-	A72	4,089,372	05/1978	Тепу		++	
1	A73	4,093,026	06/1978	Ridley			
	A74	4,096,163	06/1978	Chang, et al.		1-1	
+-	A75	4,130,575	12/1978	Jorn et al.		+	
+	A76	4,133,825	01/1979	Stroud et al.		+	
$\top$	A77	4,138,442	02/1979	Chang et al.			
_	A78	4,186,801	02/1980	Madgavkar et al.		++	
	A79	4,250,230	02/1981	Тепту		+-+	
+	A80		02/1981	Madgavkar et al.		+-+	
_	A81	4,273,188	06/1981	Vogel et al.		+-+	
	A82	4,274,487	06/1981	Hollingsworth et al.		-	
	A83		11/1981	Madgavkar et al.	++	++	No.
$\neg$	A84		11/1981	Tsai et al.			
$\top$	A85	4,359,687	11/1982	Vinegar et al.			<b>9</b>
_	A86	4,363,361	12/1982	Madgavkar et al.			W NO
_	A87		01/1983	Madgavkar et al.		<b>6</b> 2.	1 10°
	A88		03/1983	Madgavkar et al.	\	413/04	× × ×



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VITIALS	DES.	4,381,641	05/1983	Madgavkar et al.			
(M)	A90		08/1983	Vinegar et al.			
	A91	4,398,151	10/1983	van Dijk et al.		1	ļ
200	A92	4,407,973 4,409,090	10/1983	Hanson et al.			
	A93	4,444,258	04/1984	Kalmar		1	
	A94	4,501,445	02/1985	Gregoli			
	A95	4,530,401	07/1985	Hartman et al.			
	A96	4,540,882	10/1985	Vinegar et al.		1	<u> </u>
	A97	4,542,648	10/1985	Vinegar et al.		1	
	A98	4,570,715	02/1986	Van Meurs et al.		<del>  </del>	<u> </u>
	A99	4,571,491	02/1986	Vinegar et al.	$\bot$		
-	A100	4,572,299	02/1986	Vanegmond et al.			
	A101	4,583,046	04/1986	Vinegar et al.			
	A102	4,583,242	04/1986	Vinegar et al.		44	
	A103	4,594,468	06/1986	Minderhoud			
-200	A104	4,597,441	07/1986	Ware et al.		4 1	
	A105	4,605,680	08/1986	Beuther et al.			
	A106		09/1986	Vinegar et al.			
├─┼─	A107		10/1986	Stegemeier et al.			
	A108		01/1987	Vinegar et al.			
	A109		02/1987	Vanmeurs et al.			
	A110		02/1987	Vinegar et al.			
-	A111		04/1987	Vinegar et al.			_
-	A112		05/1987	Vinegar et al.		++	
1	A113		06/1987	Vinegar et al.		44	
-	A114		01/1988	Eastlund et al.		++	
1	A115		01/1988	Vinegar et al.		- 1 / - 1	O
	A110		03/1988	Vinegar et al.		++	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	A11		03/1988	Vinegar et al.			O TO THE
	A11		05/1988	Vinegar et al.			July 3

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DIM _	A120	4,762,425 4,769,602	09/1988	Vinegar et al.			
	A121	4,769,606	09/1988	Vinegar et al.		<u> </u>	
	A122	4,793,656	12/1988	Siddoway et al.			
	A123	4,827,761	05/1989	Vinegar et al.			
	A124	4,848,924	07/1989	Nuspl et al.		<u> </u>	
	A125	4,856,341	08/1989	Vinegar et al.			
	A126	4,860,544	08/1989	Krieg et al.		1-1-	
	A127	4,866,983	09/1989	Vinegar et al.		1-1-	
	A128	4,884,455	12/1989	Vinegar et al.		<del>                                     </del>	ļ
	A129	4,886,118	12/1989	Van Meurs et al.			ļ
	A130	4,927,857	05/1990	McShea III et al.			
	A131	4,974,425	12/1990	Krieg et al.			
	A132	4,983,319	01/1991	Gregoli et al.			
	A133	4,984,594	01/1991	Vinegar et al.			
	A134	4,987,368	01/1991	Vinegar			
	A135	4,994,093	02/1991	Wetzel et al.			
	A136		05/1991	Puri et al.	$\bot \bot$		
<del>  </del>	A137		10/1991	Glandt			
	A138		09/1991	Krieg et al.			
	A139	<del></del>	10/1991	Van Egmond			
	A140		10/1991	Glandt et al.		+-+	
	A141		11/1991	Van Egmond			
	A142		12/1992	Stegemeier et al.			
	A143		02/1993	Carl, Jr. et al.		146 17	81
1	A144		03/1993	Vinegar et al.			
1	A145		05/1993	Cates et al.		<del></del>	Dy C
1	A140		05/1993	Ostapovich et al.		1	Salar Salar
-	A147		07/1993	Nahm et al.		0,	1000
1	A14		07/1993	van Egmond et al.		2/13/01	\$P. \\ \sqrt{\sq}}}}}}}}\sqrt{\sq}}}}}}}}}}\sqit{\sqrt{\sint}\sintitex{\sqrt{\sqrt{\sq}}}}}\sqitindep\sintitita\sintiq}\sign{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}\sintit

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XAM.	REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
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EXAMINER:

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